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## **ABSTRACT**

This review of the research literature on the effectiveness of telecourses covers the period from summer 1986 through fall 1989. The major findings are as follows: (1) in general, based on course grades or pre- and posttest measurements of learning, student opinion, and faculty opinion, telecourses have been found to be as effective as conventional, face-to-face courses; (2) telecourses are superior to correspondence courses; (3) although telecourses do not allow the frequent and spontaneous interaction with faculty and other students that is possible in conventional classrooms, their  $v_{\text{clilication}}$  has facilitated major improvements in the convenience of access; and (4) when well produced, telecourses impose a discipline and organizational rigor on instructors that is not required in the looser structure of the conventional classroom. It is concluded that the major issue with telecourses is not whether or not they are as effective as face-to-face courses per se, but whether telecourses are skillfully planned and delivered, with the same attention to pedagogical and organizational issues that is essential in planning and delivering a conventional course. (38 references) (GL)

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## TELECOURSE EFFECTIVENESS: A RESEARCH-REVIEW UPDATE

BY

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NOVEMBER 1989

Prepared for the Washington State Board for Community College Education

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This is a brief review of the research literature on the effectiveness of telecourses. The literature reviewed is from summer 1986 to fall 1989; it builds on and updates the comprehensive review prepared by Nil Whittington in 1986.

Research reports and journal articles discovered, for the most part, through a computer-assisted search of the ERIC and Dissertation Abstracts International bibliographic data bases corroborated Whittington's (1986) findings. In general, telecourses have been found to be as effective as conventional, face-to-face courses. These findings are based on course grades or pretest-posttest measurements of learning (e.g., Stover, 1986; Wergin, Boland, and Hass, 1986; Adams, 1987; Flagg, 1987), student opinion (e.g., Platten and Barker, 1987; Livieratos, 1988; Research Communications, Ltd., 1988; Relaford, 1988) and faculty opinion (e.g., Oaks, 1986; Research Communications, Ltd., 1988).

None of the evaluations of telecourse quality was based on an experimental design that would have controlled for all influences on student performance or satisfaction. The major influence not controlled was self-selection into telecourses. That is, students who chose to enroll in a telecourse may have been predisposed to be satisfied with and do well in the course. predisposition, however, need pose no practical obstacle to widespread use of telecourses as long as students have the choice to take a telecourse or its face-to-face equivalent. Often, though, students do not have this choice if it is impractical for them to travel to the campus where the face-to-face course is being delivered. In such cases the issue is not whether telecourses are as effective or satisfying as conventional courses, but whether telecourses are an acceptable method of delivering instruction to students who do not have access to conventionally taught courses. research literature strongly supports the conclusion that telecourses are indeed an effective way to deliver instruction to students who do not have convenient access to the conventional alternative. Further, research indicates that telecourses are superior to correspondence courses (Adams, 1987; Platten and Barker, 1987).

All of the previous discussion is not to say that telecourses have no weaknesses. Throughout the research literature, concerns were expressed that telecourses did not allow the frequent and spontaneous interaction with faculty and other students that is possible in conventional classrooms. While these concerns were predictable, none was stated so strongly as to suggest telecourses not be used. Rather, concerns were expressed as qualifications to otherwise enthusiastic evaluations of the value of telecourses. In general, no one concluded that telecourses should replace conventional courses, but all judged telecourses to be an effective way to increase access to higher education as a complement or supplement to conventional classroom instruction (Carver and Mackay, 1986, p. 27; Stover, 1986, p. 272; Barron, D., 1987, pp. 270-271; Cunningham, 1988, p. 212; Raymond, 1988, p. 290; Research Communications, Ltd., 1988, pp. xi, xiii).

Telecourses trade off the intimacy of face-to-face instructor-student interaction for major improvements in the convenience of access. And telecourses, when well produced, impose a discipline and organizational



rigor on instructors that is not required in the looser structure of the conventional classroom. In general, the observed weaknesses of telecourses all seemed to be things that could be or already were being improved upon (e.g., Oaks, 1986; Egan, 1988). This implies that the major issue with telecourses is not whether they are as effective as face-to-face courses per se, but whether telecourses are skillfully planned and delivered, with the same attention to pedagogical and organizational issues that is essential in planning and delivering a conventional course.



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